Science Coordination Group
Meeting Summary – Meeting #2
The Westin Beach Resort in Key Largo
97000 Overseas Highway
Key Largo, Florida
February 10 – 11th, 2004

Attendance:

Lisa Beever, CHNEP
John Benjamin, NPS
Ronnie Best, USGS (10th)
Joan Browder, NOAA/NMFS
Kevin Burger, SFERTF
Robert Doren, SFERTF
Kate Elliott, SFERTF
Ken Haddad, FWCC
Richard Harvey, EPA
Greg Knecht, FDEP
Joette Lorian, Miccosukee Tribe (11th)
Cherise Maples, Seminole Tribe
Susan Markley, DERM
Greg May, SFERTF (10th)
Rafaela Monchek, SFERTF
Peter Ortner, NOAA/AOML
Bill Reck, USDA
Terry Rice, Miccosukee Tribe (10th)
Barry Rosen, USFWS
Rock Salt, DOI
Jay Slack, Working Group
Cheryl Woodward, SFERTF

Administrative Items:

- The meeting summaries were approved without changes.
- Include alternates on membership roster
- Add Terry Rice to roster
- John Volin is representing local government
- Include members of the audience in minutes
- Joan Browder's email address doesn't not have an r in her email address

Whiparound:

John Benjamin announced that Dan Kimbel will be attending the next meeting and that the assessment of the Interim Operational Plan has gone out
John Ogden, Nick Aumen and Joan Browder presented on gaps in science at the Everglades Coalition.
Rock announced a new draft of the DOI Science Strategy will be out shortly.
Jay announced there will be a one hour Working Group meeting following the next Task Force meeting on Thursday the 19th.

Staffing Letter:

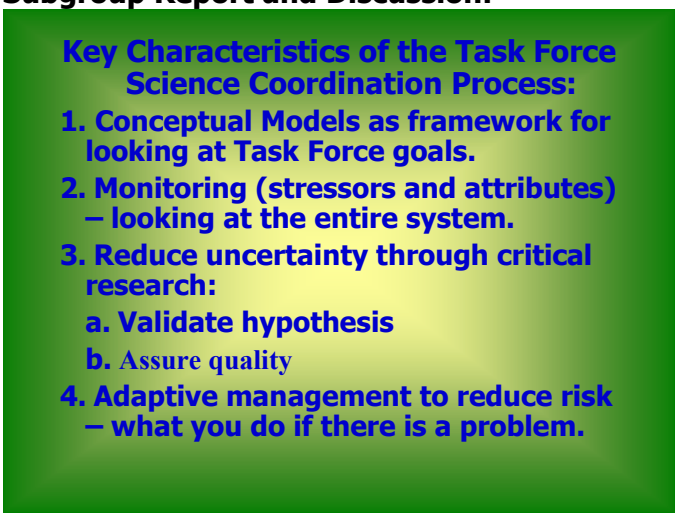
A letter to the House of Representative's Committee on Appropriations was distributed that will accompany the staffing report due to them in February.
Peter suggested changing the 8th line of the first paragraph under Science Coordination Group Staffing Requirements from "Additionally, it is anticipated that some additional support, in the form of contract or other technical expertise" be changed to show that this is certain.

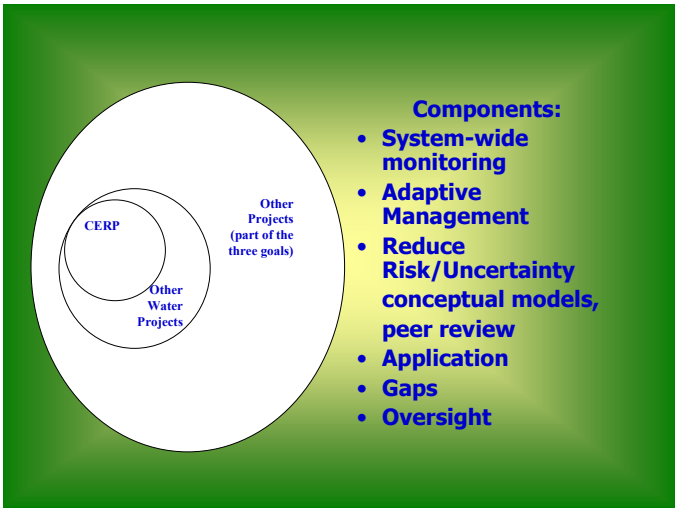
Expectations and Time Tables:

- The team will be able to determine the process but not identify all the gaps.

- Some technical support is needed – someone can be hired to write the draft of the report.
- By the end of February we must provide a timeline of what we will provide.
- May be able to bring short-term goals to the Task Force and long-term goals at a later date.

Subgroup Report and Discussion:





Comments:

- Conceptual models mean full regional specific models - with 10 regions, including the total system. The models were developed to encompass everything that might be affecting the system in the broadest possible sense.
- Gap in that there is not yet a total systems model – biggest gaps may be the ones between the models.
- Linkages by flows of water, movement of animals
- Make sure boundary levels are compatible

Item	Comments
I. Principles/Criteria	Part of purpose / scope discussion; Not part of Identifying Strategic area.

a. Overarching focus is on science that is critical for Restoration success	Focusing on goals critical to Restoration success at the system level
b. Task Force goals establish science coordination priorities.	Science coordination goals will be set based on the priorities of the Task Force.
c. The plan to coordinate science must:	
i. Be system-wide in scope	
ii. Identify needed improvements in science, including research, modeling, monitoring and application	
iii. Communicate in a meaningful way	
iv. Define a process for improved science coordination.	
v. Reduce uncertainty and risk in the Restoration and assist the Task Force in refining Restoration objectives.	Something failing on the small scale that could affect the large scale. I–c-v. is intended to be a checklist of whether we have done our job right.
II. Identify strategic science and processes to refine Restoration objectives and to reduce uncertainty and risk	
a. Conceptual model will be the foundation for defining Restoration relevant research, modeling and monitoring.	System-wide, identifies monitoring needs A lot of this information has already been done in the Conceptual Models. 10 regional/total system teams that will contribute The leaders of the teams will meet first to determine the format and will be responsible for fleshing out their parts.
i. Uncertainties in linkages/hypotheses will identify research and modeling needs.	Determine the gaps between the models. Focus on hypotheses with greatest uncertainty. Jack Gentile has expertise in this area.
ii. The stressors/attributes provide the basis for total ecosystem monitoring needs.	Framework for thinking through the process of the major stressors and the indicators for the stressors and create system-wide network for determining monitoring needs. Jack Gentile has expertise in this area.
iii. A Risk Assessment process will be used to establish the strategic priorities of the research, modeling and monitoring identified.	Jack Gentile has expertise in this area. Team must better understand this element. Risks: • Being wrong • Leaving out something important • Gaps between the models • Focus on those risks with the greatest consequences

	• Regulatory management meaning of risk management • Risk assessment to further prioritize items of the highest importance • Determine where new models are needed.
b. Applications:	Categories for bubbling up the most important application science. Task Force documents – strategic plan, performance targets.
i. Conceptual model stressors and attributes will be the basis for establishing ecosystem-wide targets and performance measures.	Linked to II.
ii. Identify the other science applications needed to support management decision making.	Adaptive assessment process and strategy. RECOVER is working on this in the CERP domain, need to determine who is doing this and what needs to be done in the non-CERP domain.
1. Integration/synthesis	Translation from science into layman's terms. Ensure integration and synthesis is happening at the system level. Bridging gap between manager and scientist fear that the right issues aren't being addressed. Recognition that there is a gap in what is not covered by CERP.
2. Adaptive management protocols	Support management decision-making process Just doing the science is not enough, the science must facilitate the management decision-making process.
3. Multi-agency science planning process	Need something to cover entire system, not just RECOVER.
4. Communicating science to managers and other agencies.	Potential new item.
c. Quality assurance processes:	How science can be improved. Continue integration into quality assurance. Standard peer review at the scientist level without imposing on agencies. Adequacy of programs for meeting their charge. Are we meeting restoration success? WG has dealt with some of their priorities with regional or issue teams. Model for teams has been tried and proven in TF and WG. Must be an issue that if you don't pay attention to this, restoration will fail. PARAGRAPH on promoting team approach to dealing with single decision making where needed
i. Peer review	Does the science being done meet quality

	assurance through a peer review process? Scientists know data changes over time, so there is a flaw in taking science in its value after it has gone through peer review process. Create a category of types of science must go through peer review. Expectation that science and technical information is being done with the benefit of independent review. Looking for open information flow.
ii. Science communication processes (conferences, internet)	What role do we play in the science coordination plan in communication? Conferences are incredible valuable to the scientists, providing an opportunity for integration. The SCG must make an effort to communicate to managers the importance of conferences, and the information generated. The frequency should be determined by the return on investment. The plan should have a section on the GEER conference and what it should be accomplishing. Internet: Pre-publication drafts being shared on the internet. Create awareness amongst scientists that they are not in a bubble – what they are doing has a role in the bigger picture. Problem with many scientists not wanting to reach out. Need to seek information from scientists on a one-page format to put on the internet. Must create standardized data sets and make it useful after data is acquired. Also must find a way to convince scientists of the importance of it. Consider looking at what SOPHIA is capturing, and work off of it. Susan will produce draft on the conferences. Joan will produce draft on the internet.
iii. Integrating data sets	Onus on the Task Force to better integrate data; report consistent findings – compatibility in the way you look at the same question when collecting data. Consider hiring someone to look at compatibility of data and decide where we need to go.
iv. Access to data	Making information available to other agencies and the public. Have a Screening system to search for all information on any topic.
III. Identify programs to meet strategic science and process requirements	There is already a lot of thought in RECOVER with a focus on CERP but may not be done with concern for items outside of CERP. Must look around and

	see if CERP didn't do it, did anyone else? Need to apply additional risk criteria after going through available data.
a. Compare strategic priorities and processes with work already being done by RECOVER.	
b. Determine which of the remaining strategic requirements not being covered by RECOVER are being addressed by other agencies.	
IV. Specification of programmatic needs and gaps	
a. Determine if the strategic priorities and process already being done are sufficient for Task Force purposes	
b. Make recommendations for remaining unaddressed strategic priorities and processes (e.g. remove barriers to sharing data, GEER conference, peer review system, Multi-agency science planning process, restoration-wide adaptive management commitment and system)	

General Process Comments:
Contract assistance would be useful in facilitating discussion with 10 CERP team leaders. Each regional team leader will provide a one-page synthesis of their conceptual models addressing the sections on conceptual models.

Must be able to unemotionally look at each element and determine the most critical and provide them in the form of actionable items to the Task Force. The Task Force must be able to make meaningful changes in response.

If social science aspects are important, the only way for it to be included is to make it a part of the plan's process.

Must determine what necessary elements (social and scientific) are missing from the conceptual model, and how do each of them differ. There aren't major exclusions at the gross scale.

Steve Davis would be a key person to get in touch with to help attain information from team leaders. He was involved in the development of all of the conceptual models.

Identify common stressors between models.

3 steps in developing model:

1) Take 10 conceptual models, look at characteristics of models and determine most common relationships

2) Talk to people who developed model to determine gaps – what are the most important things missing from the models. Take the lists for each model and determine most common gaps.
3) Take results of 1 and 2 to determine identified arena of what is important to consider, and what the gaps are. Pull out the little pieces that can be determined critical that if these pieces fail, restoration fails.

Must duplicate the manager/science interface occurring in RECOVER for this process as well.

A better process must be used to ensure a response is received when items are handed to the Task Force.

Greg distributed a handout on concepts for prioritizing SFERTF Work Effort.

Relationship with the WG and the TF:
The WG and the SCG are two operational bodies working for the Task Force. In some forms the TF is now hearing or directing where in the past the WG was a filter for the TF. In the current situation a science failure can trigger policy options. The team must discuss ways to exchange information – must be something in addition to just Jay coming to the SCG meetings and Rock/Ken going to the Working Group meetings.

Public comment:
Lisa Beever suggested adding a v. under quality assurance to include RRCT input.

Timeline:
Plan Timeline:
September is the deadline for a plan. By then, will also have identified some of the high priority needs – both information and process. The Task Force must know that the team can't predict right now how far (complete) the information will be. The task right now is the process, and that must be complete by September, and only some of the outcomes will have been established by then.

There is the potential for two documents – one to address the plan, and another to focus on the gaps.

By the end of April: draft of section identifying highest priority strategic science and processes
By the end of June: draft of Gaps and Duplications section
By the end of August: draft of the plan

In the Interim, contract help could extract significant information from model leaders; and provide counseling on creating a risk assessment tool - repeatable methodology to assign risk. Also could complete II A i. And ii. for all 10 models.

Bob will take a first shot at the section for II.B.ii.

Time Table:

Plan Section	F	M	A	M	J	J	A	S	O
Identify Strategic science & processes			x						
Risk analysis for gaps and duplication					x				
Identify high priority gaps and duplication							X		
Draft Report							x	x	

Next meeting:

- Further sort through the methodology outline – sections III and IV
- Discuss: Here is what's important, what are we doing that addresses that, and what are the gaps.
- Meet with Jack Gentile.
- March 2nd – Homestead Krome Center. (note: this meeting was changed to the Homestead Agricultural Center)

Future Meetings:

The March 30 – 31st meeting was cancelled.
There will be a one day meeting in April on the 19 in Miami, at FIU. The first part of A will be done by then.
The subgroup will continue to meet in the interim with the contractor.